

## Sequence alignment for 10/668,035

GPR3\_HUMAN

ID GPR3\_HUMAN Reviewed; 330 AA.

AC P46089;

DT 01-NOV-1995, integrated into UniProtKB/Swiss-Prot.

DT 01-NOV-1995, sequence version 1.

DT 21-AUG-2007, entry version 68.

DE Probable G-protein coupled receptor 3 (ACCA orphan receptor).

GN Name=GPR3; Synonyms=ACCA;

OS Homo sapiens (Human).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Mammalia; Eutheria; Euarchontoglires; Primates; Haplorrhini;

OC Catarrhini; Hominidae; Homo.

OX NCBI\_TaxID=9606;

RN [1]

RP NUCLEOTIDE SEQUENCE [GENOMIC DNA].

RX MEDLINE=96015070; PubMed=8530049; DOI=10.1006/geno.1995.1154;

RA Song Z.-H., Modi W., Bonner T.I.;

RT "Molecular cloning and chromosomal localization of human genes

RT encoding three closely related G protein-coupled receptors.";

RL Genomics 28:347-349(1995).

RN [2]

RP NUCLEOTIDE SEQUENCE [GENOMIC DNA].

RX MEDLINE=95213036; PubMed=7698767; DOI=10.1006/geno.1994.1635;

RA Iismaa T.P., Kiefer J., Liu M.L., Baker E., Sutherland G.R., Shine J.;

RT "Isolation and chromosomal localization of a novel human G-protein-

RT coupled receptor (GPR3) expressed predominantly in the central nervous

RT system.";

RL Genomics 24:391-394(1994).  
 RN [3]  
 RP NUCLEOTIDE SEQUENCE [GENOMIC DNA].  
 RX MEDLINE=95366960; PubMed=7639700;  
 RA Eggerickx D., Deneff J.F., Labbe O., Hayashi Y., Refetoff S.,  
 RA Vassart G., Parmentier M., Libert F.;  
 RT "Molecular cloning of an orphan G-protein-coupled receptor that  
 RT constitutively activates adenylate cyclase."  
 RL Biochem. J. 309:837-843(1995).  
 RN [6]  
 RP NUCLEOTIDE SEQUENCE [GENOMIC DNA] OF 1-292.  
 RX MEDLINE=95154831; PubMed=7851889; DOI=10.1006/geno.1994.1549;  
 RA Marchese A., Docherty J.M., Nguyen T., Heiber M., Cheng R.,  
 RA Heng H.H.Q., Tsui L.-C., Shi X., George S.R., O'Dowd B.F.;  
 RT "Cloning of human genes encoding novel G protein-coupled receptors."  
 RL Genomics 23:609-618(1994).  
 CC -!- FUNCTION: Orphan receptor. The activity of this receptor is  
 CC mediated by G proteins which activate adenylate cyclase.  
 CC -!- SUBCELLULAR LOCATION: Cell membrane; Multi-pass membrane protein.  
 CC -!- TISSUE SPECIFICITY: Expressed predominantly in the central nervous  
 CC system, and at low levels in the lung, kidney, testis, ovary and  
 CC eye.  
 CC -!- SIMILARITY: Belongs to the G-protein coupled receptor 1 family.  
 SQ SEQUENCE 330 AA; 35010 MW; 0F82E89200968D1E CRC64;  
 Query Match 99.9%; Score 1711; DB 1; Length 330;  
 Best Local Similarity 99.7%; Pred. No. 8e-110;  
 Matches 329; Conservative 1; Mismatches 0; Indels 0; Gaps  
 0;  
 Qy 1 MMWGAGSPLAWLSAGSGNVNVSSVGPAEGPTGPAAPLPSPKAWDVVLCISGTLVSCENAL 60

Db	1	MMWGAGSPLAWLSAGSGNVNVSSVGPAEGPTGPAAPLPSPKAWDVVLCISGTLVSCENAL	60
Qy	61	VVAIIVGTPAFRAPMFLLVGSLAVADLLAGLGLVLHF	
120		AAVFCIGSAEMSLVLVGVLAMAF	
Db	61	VVAIIVGTPAFRAPMFLLVGSLAVADLLAGLGLVLHF	
120		AAVFCIGSAEMSLVLVGVLAMAF	
Qy	121	TASIGSLLAITVDRYLSLYNALTYSETTVTRTYVMLALVWGGALGLGLLPVLAWNCLDG	
180			
Db	121	TASIGSLLAITVDRYLSLYNALTYSETTVTRTYVMLALVWGGALGLGLLPVLAWNCLDG	
180			
Qy	181	LTTGCVVYPLSKNHLVVLAI	
240		AFFMVF	
		GIMLQLYAQICRIVCRHAQQIALQRHLLPASHYV	
Db	181	LTTGCVVYPLSKNHLVVLAI	
240		AFFMVF	
		GIMLQLYAQICRIVCRHAQQIALQRHLLPASHYV	
Qy	241	ATRKGIATLAVVLGAFAACWLPFTVYCLLGDAHSPPLYTYLTLLPATYNSMINPIIYAFR	
300			
Db	241	ATRKGIATLAVVLGAFAACWLPFTVYCLLGDAHSPPLYTYLTLLPATYNSMINPIIYAFR	
300			
Qy	301	NQDVQKVLWAVCCCCSSSKLPFRSRSPSDV	330
Db	301	NQDVQKVLWAVCCCCSSSKIPFRSRSPSDV	330